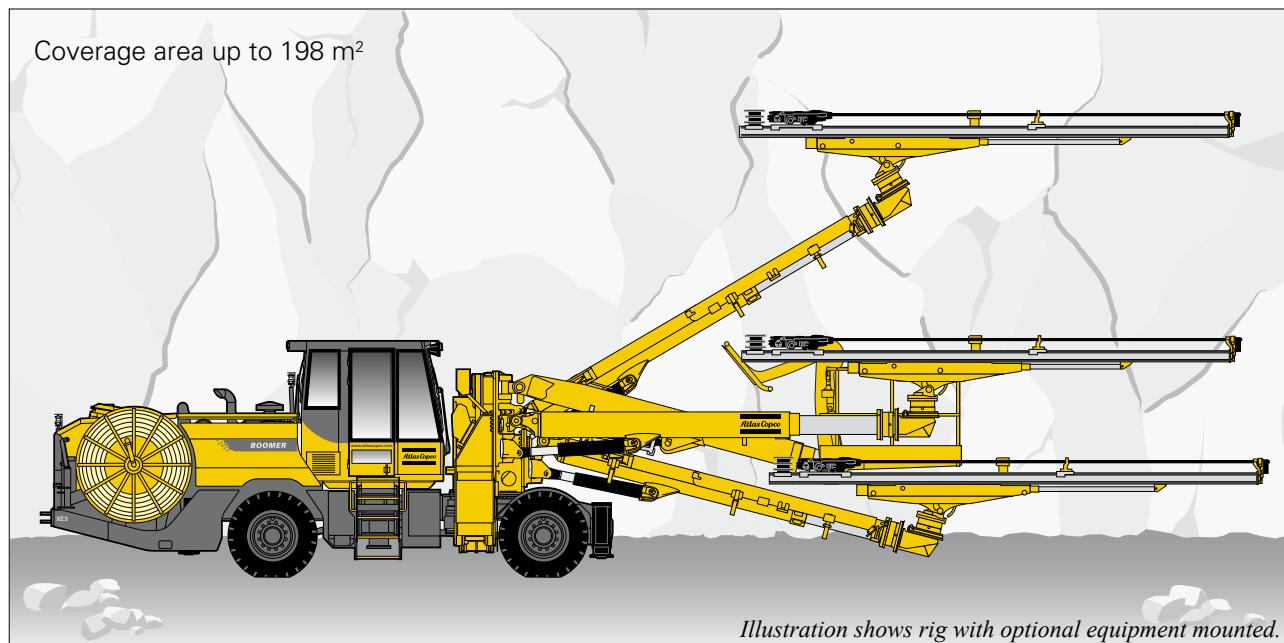


Boomer XE3 C

Equipped with COP 3038 rock drills



Three boom hydraulic tunnelling rig with high reach console, an advanced Rig Control System, COP 3038 rock drills and heavy-duty BUT 45 booms for superior productivity.

Standard features

» Rock drill

- High-frequency COP 3038 rock drills with dual-damping system for optimal consumable life
- Pressurized housing and mating surfaces to reduce internal contamination of the rock drill

» Hydraulic boom

- BUT 45 heavy-duty booms for direct, fast and accurate positioning between holes
- Double rotation unit for ± 190 degrees feed roll-over and ± 135 degrees feed rotation

» Hydraulic feed

- BMH 6900-series heavy-duty aluminium feed with high bending and torsional resistance for maximum durability
- Snap-on stainless steel sleeves and polymer contacts

» Control system

- Advanced Rig Control System (RCS) allowing several levels of automation to suit customer requirements
- Standard functions include soft collaring and the anti-jamming function Rotation Pressure Controlled Feed (RPCF)
- Integrated diagnostic and event logging system to assist in equipment maintenance
- Interactive operator panel with full-colour display

» Carrier

- Sturdy carrier with all-wheel drive
- Powered by a 6-cylinder, EPA III/COM III (Tier 3/Stage IIIA) approved diesel engine
- Four jacks for stable set-up

» General

- FOPS-approved cabin
- Hydraulically driven water booster pump
- Hydraulically driven compressor
- Cable reel
- Working lights

Specifications

ROCK DRILL

	COP 3038
Shank adapter	TC45
Height over drill centre	84 mm
Length without shank	970 mm
Impact power	30 kW
Impact rate	102 Hz
Hydraulic pressure	200 bar
Rotation system	Separate rotation
Rotation speed	0–380 rpm
Rotation torque, max	190 Nm
Lub. air consump. at 4 bar	5 l/s
Flushing water	20–30 bar
Water consumption, max	130–190 l/min*
Weight	165 kg
Sound level	<106 dB(A)

*Depending on drill steel

FEED

BMH 6900	BMH 6914	BMH 6916	BMH 6918	BMH 6920	BMH 6921
Total length	5 988 mm	6 598 mm	7 208 mm	7 778 mm	8 078 mm
Drill steel length	4 310 mm	4 920 mm	5 530 mm	6 100 mm	6 400 mm
Hole depth	4 043 mm	4 668 mm	5 268 mm	5 843 mm	6 140 mm
Weight, incl. drill	666 kg	700 kg	731 kg	756 kg	785 kg
Feed force	22.0 kN				

» Boom

- Boom BUT 45 L
- Feed extension 1 800 mm
- Boom extension 2 500 mm
- Parallel holding complete
- Feed roll-over $\pm 190^\circ$
- Feed cross-cut $\pm 135^\circ$
- Max. lifting angle $+55^\circ$ – 42°
- Max. swinging angle $\pm 42^\circ$
- Weight, boom only 3 200 kg

» Air system

- Hydraulically driven screw compressor... Atlas Copco GAR 5
- Capacity, max at 9 bar 26 l/s
- Adjustable speed
- Air pressure gauge
- Hole blowing kit with 80 l air receiver

» Water system

- Hydraulic water booster pump Johnson
- Water booster pump max capacity at 30 bar 750 l/min
- Min water inlet pressure at water cooler at 600 l/min, 3 bar
- Water pressure gauge
- Water flow guard
- Pressure compensated water pump

» Control system

- Rig Control System (RCS) – versatile and upgradeable to a higher degree of automation
- One adjustable, electronic control panel with colour display
- Transfer of data and backup settings
- Integrated diagnostic system
- Separate battery for electronic system

» Electrical system

- Total installed power 293 kW
- Main motors, Sf 1.3 3 x 95 kW
- Voltage 690–1 000 V
- Frequency 50–60 Hz
- Starting method star/delta (1 000 V direct start only)
- Electronic overload protection for electric motors
- Percussion hour meter on operator display
- Phase sequence indicator
- Earth fault indicator
- Battery charger
- Power supply 24 V DC
- Transformer 8 kVA
- Cable reel, diameter 1 800 mm
- Dual controls for cable reel

» Hydraulic system

- Hydraulic pumps 3 separate units, one for each boom
- Pumps unloaded at start
- System pressure, max 250 bar
- Hydraulic oil tank, volume max/min 755/470 l
- Low oil level indicator
- Oil temperature gauge on oil tank
- Electrical oil filling pump
- Oil filter indicator
- Water cooled oil
- Filtration 16 μ m
- Mineral hydraulic oil

» Carrier

- Deutz 6-cylinder, TCD 2013 L06, 2V EPA III/COM III (Tier 3/Stage IIIA) approved 4-stroke water-cooled diesel engine
- Power rating at 2 300 rpm 173 kW (232 hp)
- Torque at 1 500 rpm 907 Nm
- All-wheel drive
- Hydrostatic power steering system
- Hydrodynamic transmission Dana 32000
- Front axle Dana 37R 116
- Rear axle Dana 276, $\pm 8^\circ$ oscillation
- Manual differential lock on front axle, Hydralock
- Tyres 14.00 x R24
- Clearance outside axles 15°
- Hydraulic jacks, front 2 extendable
- Hydraulic jacks, rear 2
- Service brakes 2 separate circuits
- Emergency and parking brakes SAHR
- Fuel tank, volume 150 l
- Silencer
- Electric system 24 V
- Batteries 2 x 125 Ah
- Tramming lights 6 x 40 W LED + 2 x 70 W
- Working lights 6 x 80 W LED
- Illuminated stairs for platform 2 x 70 W
- Fire extinguisher
- Spirit level one for longitudinal, one for sideways
- Gradeability at max. load on drive wheels 1:4
- Horn, beacon and reverse alarm

» Cabin

- FOPS-approved cabin, noise level <80 dB(A) including fixed seat and air conditioning unit with heating function
- Hydraulic cabin lift system, 0–1 100 mm

DRIFTER RODS

Dimension	Min. hole diameter
mm SR35-H35-T38	45
SR35-R39-T38	45

SHANK ADAPTERS

Thread	Diameter	Length
mm TC45*	45	525
TC45	45	435

*Intended for RAS and extension drilling with BSH 110

COUPLINGS

Thread	Diameter	Length
mm T38/TC45	57	175

EXTENSION RODS FOR INJECTION DRILLING/RAS

Dimension	Min. hole diameter
mm R39 Speedrod	64

GUIDE TUBE FOR INJECTION DRILLING

Dimension	Min. hole diameter
mm R46	64

Optional equipment

» Feed

- Feed prepared for Rod Adding System (RAS) and Rod Handling System (RHS E), 10' extension rods
- Rod Adding System, RAS
- Rod Handling System E, RHS E
- Water spraying kit on cradle
- Hole depth sensor, hydraulic flow meter in place of standard fishing line sensor

» Boom

- Automatic boom lubrication

» Automation

- Advanced Boom Control, ABC Regular
- Advanced Boom Control, ABC Total
- Tunnel Manager software
- Rig hydraulically prepared for ABC Total
- Boom equipped for Measure While Drilling, MWD
- Measure While Drilling logging and analyzing drill data
- Bolt view
- Atlas Copco Tunnel Profiler
- Water loss measurement instruments installed in service platform
- Rig Remote Access (RRA)
- RRA server
- Total Station Navigation

» Cabin

- Front window, 24 mm
- Joystick-controlled spotlights left and/or right, 70 W
- Two operator panels (one sitting and one standing)
- Liftable operator seat

» Air system

- Compressor, GAR 30

» Water system

- Water hose reel

» Hydraulic system

- Biodegradable hydraulic oil
- Heater kit for hydraulic oil tank, diesel engine and electric motors and cabin

» Carrier

- Exhaust catalyser
- Particle filter
- Fire suppression system ANSUL (manual or Checkfire)
- Fire suppression system FORREX (manual or automatic)

» Electrical system

- Electric cable type Buflex, 690/1 000 V
- Plug for cable
- Switch gear
- Electric outlet for accessories, 16 A and 32 A (CE)
- Extra transformer 3-phase, 15kVA (230/400 V outlet)
- Soft start of electrical motor

» Miscellaneous

- Service platform, SP 3
- Swingable basket for service platform
- Retractable protective roof for service platform
- Water and air outlet in service platform
- Drainage water pipe through rig
- Hydraulic Swellex pump type H1 for manual installation
- Holder for spare drill rods
- Manual lubrication kit
- Rig washing kit
- Ni-Cr plated piston rods (limitations exist)
- Boot washing kit
- Hydraulic outlet for charging with Mini SSE

Measurements

SIDE VIEW

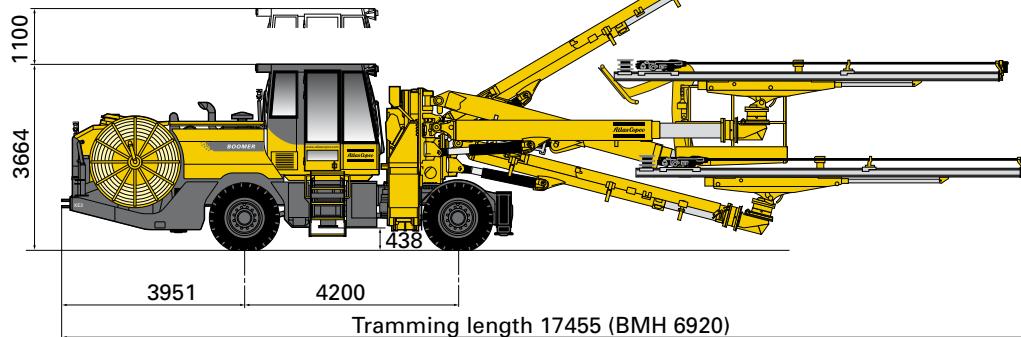
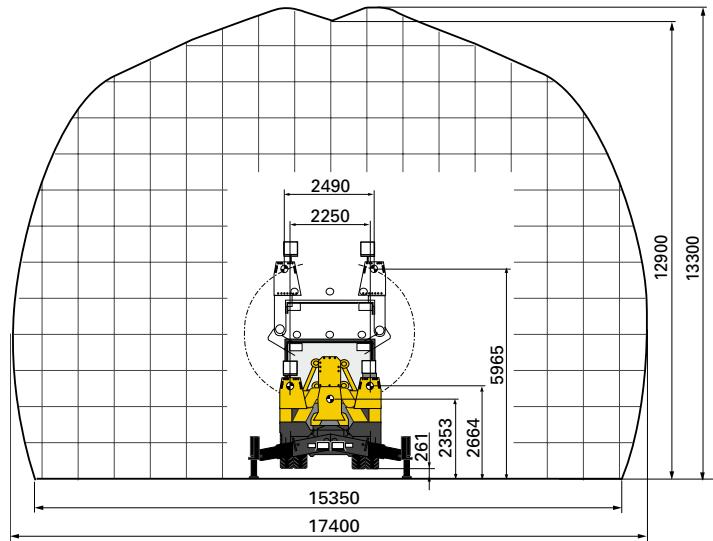


Illustration shows rig with optional equipment mounted.

COVERAGE AREA



Parallel coverage BUT 45 L.

DIMENSIONS

mm	Width	2 926
	Height with cabin	3 664
	Height cabin up	4 764
	Length with BMH 6920 feeds	17 455
	Ground clearance	438
	Turning radius outer/inner	11 450/5 900

NOISE AND VIBRATION

Operator sound pressure level in cabin, drilling, free field (ISO 11201)	75± 3 dB(A) re 20uPa
Operator sound pressure level working close to machine, drilling, free field	104±6 dB(A) re 20uPa
Sound power level (ISO 3744), drilling, free field	132 dB(A) re 1pW
Vibration levels seated, drilling (ISO 2631-1)	0.07± 0.07 m/s ²
Vibration levels standing, drilling (ISO 2631-1)	0.07± 0.07 m/s ²

WEIGHT

gross weight, depending on configuration	
kg	Total
	43 100
	Boom side
	29 900
	Engine side
	13 200

RECOMMENDED CABLE SIZE AND LENGTH

Voltage	Type	Dimension, mm ²	Diameter, mm	Length, m
690 V	Buflex	3x185+3G35	56	125
1 000 V	Buflex	3x120+3G25	46	175

Recommendations are given for surrounding temperature of 40 °C and up to a height of 2 000 m.

TRAMMING SPEED

km/h	On flat ground (rolling resistance 0.05)	>15
	On incline 1:8	>5